



REPORT TO:	Cabinet
DATE:	17th January 2023
SUBJECT:	Revocation of Bargate Bridge air quality management area
PURPOSE:	Request Cabinet to revoke by order under the provisions of the Environment Act 1995 the Air Quality Management Area (AQMA) known as Bargate Bridge AQMA
KEY DECISION:	N/A
PORTFOLIO HOLDER:	Councillor Deborah Evans
REPORT OF:	Assistant Director - Regulatory: Christian Allen
REPORT AUTHOR:	Principal Environmental Health Officer: Nick Davis
WARD(S) AFFECTED:	Trinity
EXEMPT REPORT?	No

SUMMARY

Boston Borough Council declared an Air Quality Management Area (AQMA) in the Bargate Bridge area in 2005 following modelling and monitoring demonstrated non-compliance with the statutory national air quality standard for Nitrogen Dioxide (NO₂). An Air Quality Action Plan (AQAP) was developed to try and improve air quality within this area, our other AQMA at Haven Bridge and more generally across the town. Air Quality in this area has subsequently been monitored for a number of years and NO₂ levels have reduced over this period and now show consistent compliance with the air quality standard. As a result and in line with the Environment Act 1995 and associated policy and technical guidance the AQMA should now be revoked.

RECOMMENDATIONS

That Cabinet agrees by Order under the Environment Act 1995 Part IV to the revocation of the Bargate Bridge Air Quality Management area following consistent compliance with the national statutory nitrogen dioxide air quality objective.

REASONS FOR RECOMMENDATIONS

To ensure the Council fulfils its legal obligations under the Environment Act 1995 and statutory guidance in terms of air quality.

OTHER OPTIONS CONSIDERED

There are no alternatives that would comply with the statutory policy guidance PG22 (Aug22) which states:

'There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive five-year period.'

1. BACKGROUND

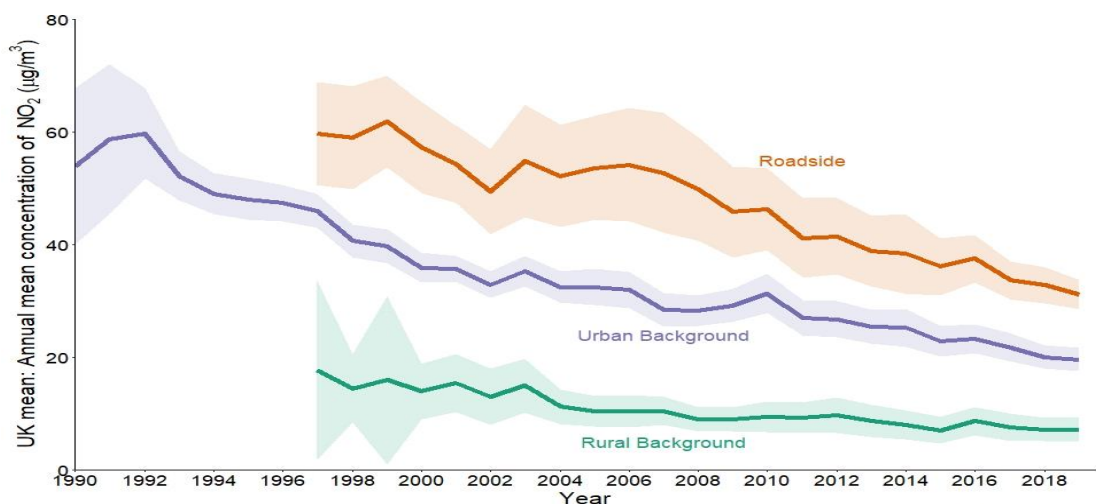
1.1 Local authorities have a duty under the Environment Act 1995 to ensure air quality within its district meets national Air Quality Standards (AQS) and to report on this to central Government. Where these standards are not being achieved the local authority is obliged to declare an Air Quality Management Area for the pollutant of concern. Boston Borough Council has declared two such areas in respect of Nitrogen Dioxide (NO₂) annual mean exceedances. These areas are known as Haven Bridge Road Air Quality Management Area (See appendix B for area plan) and Bargate Bridge Air Quality Management Area (See appendix A for area plan). Where an Air Quality Management Area (AQMA) is declared the local authority is legally required to draw up an Air Quality Action Plan (AQAP) and work with partner organisations to improve air quality in those area's declared. Boston has a current AQAP drawn up with partners such as Lincolnshire County Council and Public Health.

1.2 Air quality in terms of Nitrogen Dioxide which is directly associated with road traffic has improved since declaration of the AQMA's and in the case of the Bargate Bridge AQMA compliance with the AQS for Nitrogen Dioxide has now been achieved for the last 5 years. This report expands on the monitoring undertaken by Boston Borough Council's Environmental Health, the results, reasons for the improvements in air quality and recommends the Bargate Bridge AQMA is now revoked.

2. REPORT

- 2.1** Boston Borough Council has the duty to fulfil the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is found or is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.
- 2.2** Boston Borough Council has declared two AQMA's, both in relation to nitrogen dioxide (NO₂) exceedances of the 40µg/m³ annual mean. These exceedances are associated in the main with road traffic. These are known as the Haven Bridge AQMA and the Bargate Bridge AQMA and were declared in 2001 & 2005 respectively. Following declaration, as is required by legislative requirements, an AQAP was prepared and this action plan has been updated as required with the latest AQAP being approved by Cabinet in 2021.
- 2.3** As part of the Council's air quality function it monitors NO₂ using a series of strategically placed diffusion tubes located within the AQMA's and at other locations where detailed assessment has indicated risk of failure to meet air quality standards. The council's monitoring has shown that generally there has been a reduction in NO₂ across the monitoring network and whilst levels within the Haven Bridge AQMA have fallen they remain above the statutory objective levels. This is no longer the case in the Bargate Bridge AQMA. The AQMA in the Bargate Bridge area was to some extent a more marginal breach when declaration was made in 2005 and over the last 5 years monitoring has shown compliance with the statutory air quality objective for NO₂.
- 2.4** The reduction in nitrogen dioxide levels since the AQMA was declared is likely resultant from improvements in vehicular engines and fuels driven by UK Government and EU legislation. The Government's own study into nitrogen dioxide levels published on the .GOV website shows that between 2007 and 2019 inclusive, the annual mean concentrations at roadside sites reduced by an average of 1.8 µg/m³ each year (see figure 1). This they attributed to the large reduction in road transport emissions as newer vehicles subject to stricter emission standards entered the transport fleet. Smaller but nonetheless significant falls in UK background levels have also been observed.

Figure 1 Annual mean concentrations of NO₂ in the UK, 1990 to 2019 (Source .GOV.UK)



Source: Ricardo Energy & Environment

- 2.5** Whilst significant falls in nitrogen dioxide levels have resulted from improved more efficient vehicular engines and cleaner fuels the impact of the council’s Air Quality Action Plan (AQAP) cannot be overlooked. Developed in conjunction with LCC highways this has and continues to seek improvements in traffic management, sustainable travel, low carbon infrastructure such as EV charging and ensuring that economic development wherever possible brings about environmental improvement.
- 2.6** The statutory guidance TG22 (Aug22) advises local authorities that before revoking an AQMA on the basis of measured pollutant concentrations, the authority needs to be reasonably certain that any future exceedances are unlikely. For this reason, it is expected that authorities will need to consider measurements carried out over several years before revocation is considered. Air Quality monitoring can have some inherent variation/uncertainties and considering measurements over a longer period allows for significantly more certainty of the results. In the Bargate Bridge AQMA monitoring has shown consistent compliance for 5+ years.
- 2.7** The statutory guidance recommends that revocation of an AQMA should be considered following three consecutive years of annual mean NO₂ concentrations being lower than 36µg/m³ (i.e. within 10% of the annual mean NO₂ objective). It also states that ‘*There should not be any declared AQMAs for which compliance with the relevant objective has been achieved for a consecutive five-year period.*’ This is now the case in the Bargate Bridge AQMA as can be seen in figures 2 & 3 below.

Figure 2 provides tabulated annual normalised data at monitoring locations within the AQMA and Figure 3 distance corrected levels at residential receptors. Nitrogen Dioxide levels fall away quite quickly with distance from the source, in this case road traffic.

Figure 2 – Monitored Annual Mean Nitrogen Dioxide Levels (µg/m³)

Site Description	2014	2015	2016	2017	2018	2019	2020	2021
Bargate Roundabout	34.2	31.1	31.1	31.3	32.5	31.3	25.3	27.4
30 Spilsby Road	46.6	44.2	41.5	43.6	<u>39.4</u>	37.0	29.9	31.9
20 Spilsby Road	41.6	<u>36.6</u>	<u>36.7</u>	<u>37.1</u>	<u>37.8</u>	35.8	27.2	28.9
23 Spilsby Road	31.7	28.5	28.2	27.7	27.9			
32 Spilsby Road	25.2	21.4	21.8	22.5	21.8			

Bold = above AQS; Underlines=within 10% of AQS;

Figure 3 – Distance Correct Annual Mean Nitrogen Dioxide Levels (µg/m³) at 20 & 30 Spilsby Road, Boston

Site Description	2014	2015	2016	2017	2018	2019	2020	2021
30 Spilsby Road 6m	<u>38.0</u>	<u>36.2</u>	34.2	35.8	32.7	30.9	27.0	28.7
20 Spilsby Road 5m	35.5	31.6	31.7	32.0	32.5	30.9	25.7	27.2

Bold = above AQS; Underlines=within 10% of AQS;

- 2.8** As part of Boston Borough Council’s obligations under the provisions of the Environment Act 1995 each year an Annual Status Report (ASR) for air quality and developments against the AQAP is submitted to DEFRA via the Local Air Quality Management (LAQM) portal. This report is reviewed on behalf of DEFRA by their air quality consultants and feedback and commentary is

provided to local authorities. This year's ASR recommended we progress to revocation of the Bargate AQMA. The feedback provided stated:

*'The Council is intending to revoke the Bargate Bridge AQMA as, in recent years, concentrations of NO₂ within this AQMA have fallen and there is now consistent compliance with the AQS objective of 40µg/m³. As monitoring has now been below 40µg/m³ for four years within the Bargate Bridge AQMA, it is considered that the effect of the COVID-19 pandemic is not solely responsible for the reduction of concentrations and so **the intention to revoke the AQMA is supported and we agree with the revocation of the Bargate Bridge AQMA.***

2.9 Our monitoring will continue following revocation of the Bargate Bridge AQMA in order to ensure that air quality remains within air quality objectives however we do not envisage any degradation of the current situation. Monitoring and the actions within the air quality action plan will continue to be implemented in relation to the Haven Bridge AQMA and the wider environment of Boston.

2.10 Revocation of the AQMA is made by 'Order' under Part IV of the Environment Act 1995. A draft order is attached.

3 CONCLUSION

3.1 The council has demonstrated compliance with the national air quality objective standard for Nitrogen Dioxide (NO₂) in the Bargate Bridge AQMA for more than five years. In line with the statutory guidance, the Bargate Bridge AQMA should now be revoked by 'Order' under Part IV of the Environment Act 1995.

EXPECTED BENEFITS TO THE PARTNERSHIP

None

IMPLICATIONS

SOUTH AND EAST LINCOLNSHIRE COUNCILS PARTNERSHIP

None

CORPORATE PRIORITIES

Place - Make Boston a healthy and safe place to work.

Environmental Awareness & Accountability - Ensure that every service and policy deliver on the climate change commitments of the Council to support positive environmental impact on the Borough.

STAFFING

None

CONSTITUTIONAL AND LEGAL IMPLICATIONS

An Order must be made and contain the common seal of Boston Borough Council. This must be uploaded on the Local Air Quality Monitoring (LAQM) website maintained on behalf of DEFRA. It must also be made accessible to the general public. This can achieve by posting on the Local Air Quality webpage of Boston Borough Council's website.

DATA PROTECTION

None

FINANCIAL

None

RISK MANAGEMENT

Failure to manage air quality in a way that is compliant with legislation, Government Guidance and national policy exposes the Council to risk of legal challenge for non compliance with our statutory duties.

STAKEHOLDER / CONSULTATION / TIMESCALES

Portfolio Holder – Cllr Deborah Evans

Ward Councillors – Cllr Griggs & Cllr Y Stevens (Trinity Ward)

Advice was sort from the LAQM helpdesk as to consultation requirements in respect of making an Order revoking an AQMA. Their advice was that no formal consultation is required. Also PG22 Local Air Quality Management Policy Guidance does not specify any requirement for consultation. Nonetheless Environmental Health did consult local residents, and partners such as LCC, Public Health, neighbouring authorities, BTAC and ward councillors in early 2021 in anticipation of revocation. It was initially our intention to seek revocation in 2021 rather than now, however, advice from LAQM was to wait another year following the pandemic. Other than support from the ward & BTAC councillors and 'no objections' offered by North Kesteven District Council no other comments were received.

REPUTATION

Failure to manage air quality in a way that is compliant with legislation, Government Guidance and national policy exposes the council to reputational damage.

CONTRACTS

None

CRIME AND DISORDER

None

EQUALITY AND DIVERSITY/ HUMAN RIGHTS/ SAFEGUARDING

Air pollution is associated with a number of adverse health impacts. Additionally air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. Improving air quality reduces the impact on these vulnerable groups in particular and therefore the improvement in air quality must be seen as welcome news.

HEALTH AND WELL BEING

Air pollution is associated with a number of adverse health impacts. Additionally air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. Improving air quality reduces the impact on these vulnerable groups in particular.

CLIMATE CHANGE AND ENVIRONMENTAL IMPLICATIONS

There are no direct implications for climate change as a result of the decision to revoke the AQMA however areas of poor air quality in terms of nitrogen dioxide in Boston are primarily associated with traffic. Vehicular transport also releases greenhouse gases which have implications for climate change. The revocation of the AQMA demonstrates falling vehicular emissions.

LINKS TO 12 MISSIONS IN THE LEVELLING UP WHITE PAPER

MISSIONS	
This paper contributes to the follow Missions outlined in the Government's Levelling Up White paper.	
Health	By 2030, the gap in Healthy Life Expectancy (HLE) between local areas where it is highest and lowest will have narrowed, and by 2035 HLE will rise by 5 years.
Wellbeing	By 2030, well-being will have improved in every area of the UK, with the gap between top performing and other areas closing.

ACRONYMS

AQMA – Air Quality Management Area

LAQM – Local Air Quality Management

DEFRA – Department of Environment, Food & Rural Affairs

ASR – Annual Status Report

AQS – Air Quality Standard

NO₂ – Nitrogen Dioxide

µg/m³ – micrograms per metre cubed

PG22 (Aug22) - Local Air Quality Management Policy Guidance (PG22)

BTAC – Boston Town Area Committee

LCC – Lincolnshire County Council

APPENDICES

(If none then insert the word 'None' and delete the below text/boxes).

Appendices are listed below and attached to the back of the report: -

APPENDIX A	Draft Order (includes map detailing extent of Bargate Bridge AQMA)
APPENDIX B	Map detailing extent of Haven Bridge AQMA

BACKGROUND PAPERS

'No background papers as defined in Section 100D of the Local Government Act 1972 were used in the production of this report.'

CHRONOLOGICAL HISTORY OF THIS REPORT

(If none then insert the wording 'A report on this item has not been previously considered by a Council body'. Also delete the below text/boxes.)

Name of body	Date

REPORT APPROVAL

Report author:	N Davis, Principal Environmental Health Officer
Signed off by:	Christian Allen, Assistant Director Regulatory
Approved for publication:	Portfolio Holder Councillor Deborah Evans

FINANCE PROFORMA

PROFORMA FOR APPROVAL OF THE RELEASE OF RESOURCES

(CAPITAL AND REVENUE BUDGETS)

FROM:

THIS PROFORMA PROVIDES THE FINANCIAL IMPLICATIONS
IN RESPECT OF THE ATTACHED

REPORT:

REPORT DATE:

OPTION 1	£ Year 1 2020/21	£ Year 2 2021/22	£ Year 3 2022/23	£ Year 4 2023/24	£ Year 5 2024/25
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Revenue

Total Revenue Cost

Funding required:

Total capital cost £

Revenue cost £

Considered by:

Enter committee here

Enter Council or
Cabinet/Executive here

Date:

Financial Services Comments

Risk

Procurement

Value for Money Efficiency

This FP is valid for 3 months from FP date	If this FP is no longer required please advise Finance	If there are changes to the original report it may invalidate this document, it must be reviewed by Finance.